**What you'll need:**

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| Materials required to make your own constellation viewer. |
|  Empty crisps can (including lid)   Black paper or card   Drawing pin or push pin   Blu-tac   Scissors   Large nail and a hammer   Print out of [star maps](http://www.gsc.org.uk/FileAccess.aspx?id=1709) worksheet |

**Before you get started…  
Make sure you have all your materials and a thick mat or newspaper/magazine to work on. Also make sure you have an adult close by to help.**

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| Step 2 |
| **Step 1**  Clean out your can, wiping out all the crumbs. Remember to keep the lid. Ask an adult to make a hole in the centre of the bottom of your can. The hole should be about as wide as a pencil. The easiest way to do this is to gently tap on a large nail with a hammer. |

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| Step 3 |
| **Step 2**  Cut out each of the circular [star maps](http://www.gsc.org.uk/FileAccess.aspx?id=1709). Place the star maps on the sheet of black paper. Use a little bit of blu-tac to keep them in position. Again, carefully cut around the star maps so that each is now attached to a black circle. |

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| Step 4 |
| **Step 3**  Using the drawing pin, carefully poke a hole through every dot on the star map. Make sure your mat or magazine/newspaper is underneath to stop your table getting covered in tiny holes. |

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| src="/cmsimages/5_1687_1689.gif" |
| **Step 4**  Choose a star map and use the blu-tac to stick the star map to the inside of the lid of the canister. Be careful not to stick the blu-tac over any of the holes.  Put the lid back on your can.  Now decorate your viewer - be as creative as you like! |

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| Science Communicator looking through constellation viewer. |
| **Step 5**  Hold your can towards a light and look through the hole in the bottom. What can you see? Try turning the can around. Try some of the other star maps in your can. |

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| Putting torch in constellation viewer. |
| **Fun things to try…**   Share your constellations with others! Remove the lid of your can and place a small torch inside. Put the lid back on, turn out the lights and point the viewer at the ceiling. What do you see? You might need to play around with the position of the torch inside the can to get the clearest view of your constellation. Experiment! |

**Find out more...**

**You probably know that a constellation is a group of stars connected together to make an imaginary picture in a particular part of the night sky. But did you know that as the Earth moves, we see different constellations?**

**That means that at different times of the year we can see different pictures in the night sky. There are officially 88 constellations in total, covering the entire night sky visible from the earth.  Have a go at finding more constellations and making star maps for your viewer.**

**The stars and constellations are there all night… and all day! We just can’t see them during the day because the light from the sun is so bright.**

**Cultures and civilizations throughout history have identified and named different constellations. Many, such as the Greeks and Romans, have told stories about the pictures they have seen in the stars of the night sky. Many of the names we have for constellations today come from stories told thousands of years ago. Constellations are named after many things including animals, gods and goddesses.**